Babesiosis

2007 **Maryland** Case Definition

BABESIOSIS
Reportable in Maryland effective 10/8/2007

Disease
Babesiosis is a tick-borne parasitic disease that infects red blood cells and is caused by protozoan parasites of the genus *Babesia*, most commonly *Babesia microti.* It is transmitted by the bite of an infected black-legged tick, *Ixodes scapularis*.

Clinical description
Most infections are probably asymptomatic. Manifestations of disease include fever, chills, sweating, myalgias, fatigue, hepatosplenomegaly, hemolytic anemia and jaundice. Symptoms typically occur after an incubation period of 1 to 4 weeks, and can last several weeks. The disease is more severe in patients who are immunosuppressed, splenectomized, and/or elderly. Infections caused by *B. divergens* tend to be more severe (frequently fatal if not appropriately treated) than those due to *B. microti*, where clinical recovery usually occurs.

Laboratory criteria for diagnosis
1. Identification by light microscopy of intraerythrocytic *Babesia* parasites in a peripheral blood smear.
2. Demonstration of *Babesia* DNA in a whole blood specimen by polymerase chain reaction (PCR) analysis.
3. Demonstration of a positive *Babesia*-specific antibody titer with an indirect fluorescent antibody (IFA) assay for total immunoglobulin or IgG.

Case classification (This case classification is for surveillance purposes only; it is not intended to be used in clinical diagnosis.)

Probable: A clinically compatible case with a single positive *Babesia*-specific antibody titer.

Confirmed: A clinically compatible case that is laboratory confirmed by:
a) identification by light microscopy of intraerythrocytic *Babesia* parasites in a peripheral blood smear, *or*
b) demonstration of *Babesia* DNA in a whole blood specimen by PCR analysis, *or*
c) a fourfold change in *Babesia*-specific antibody titer in paired serum samples drawn 2-4 weeks apart.

Suspect: A single positive *Babesia*-specific antibody titer in the absence of clinical signs compatible with babesiosis.

Babesiosis Case Report

Maryland Department of Health and Mental Hygiene

NEDSS #

DATE

PHYSICIAN

ADDRESS

CONTACT by ☐ Mail ☐ Fax ☐ Telephone

Dear _____ Effective October 2007, babesiosis is reportable in Maryland (COMAR 10.06.01.03).

The _____ Health Department has received your patient's positive serology. Please assist us in the case investigation by completing the Clinical Signs, Symptoms and Risk section; and return this form by fax to _____.

NAME OF PATIENT – LAST	**FIRST**	**M**	**DATE OF BIRTH** MONTH DAY YEAR	**AGE**	**SEX** M ☐ F ☐	**ETHNICITY** (Select independently of RACE) HISPANIC or LATINO: YES ☐ NO ☐ UNKNOWN ☐

TELEPHONE NUMBERS Home:	Workplace:	**RACE** (Select one or more. If multiracial, select all that apply) White ☐ Am Indian/Alaskan Native ☐ Unknown ☐ Black/African American ☐ Asian ☐ Other ☐ (Specify): Pacific Islander ☐

ADDRESS	**UNIT#**	**CITY OR TOWN**	**STATE**	**ZIP CODE**	**COUNTY**

CONDITION ACQUIRED IN MARYLAND? YES ☐ NO ☐ UNKNOWN ☐	**TRAVEL** ***in the last 2 months***	**DIED** YES ☐ NO ☐	**DATE DIED** MONTH DAY YEAR	**PREGNANT** YES ☐ NO ☐ UNKNOWN ☐ NOT APPLICABLE ☐ WEEKS PREGNANT DUE DATE

Laboratory Data

CASE CLASSIFICATION (*for surveillance purposes only*)

☐ **CONFIRMED**

A clinically compatible case with

- Blood smear positive for *Babesia*, *or* ☐ Yes ☐ No
- Positive *Babesia* PCR assay, *or* ☐ Yes ☐ No
- Fourfold change in antibody titer by IFA ☐ Yes ☐ No

☐ **PROBABLE**

A clinically compatible case with a single positive antibody titer by IFA.

☐ **SUSPECT**

A single positive Babesia-specific antibody titer in the absence of clinical signs.

☐ **NOT A CASE**

	Date collected:		
	Name of laboratory:		
	TITER	Positive?	TITER Positive?
IFA-Total Ig		☐ YES ☐ NO	☐ YES ☐ NO
IFA- IgG		☐ YES ☐ NO	☐ YES ☐ NO
IFA- IgM		☐ YES ☐ NO	☐ YES ☐ NO
Other test		☐ YES ☐ NO	☐ YES ☐ NO

Clinical Signs, Symptoms and Risk

DATE OF ONSET MONTH DAY YEAR

HOSPITALIZED **DATE ADMITTED** MONTH DAY YEAR

☐ YES

☐ NO

HOSPITAL

Clinical Symptoms:			
Fever	☐ Yes	☐ No	☐ Unk
Myalgia	☐ Yes	☐ No	☐ Unk
Anemia	☐ Yes	☐ No	☐ Unk
Jaundice	☐ Yes	☐ No	☐ Unk
Hepatomegaly	☐ Yes	☐ No	☐ Unk
Splenomegaly	☐ Yes	☐ No	☐ Unk
_____	☐ Yes	☐ No	☐ Unk
_____	☐ Yes	☐ No	☐ Unk

Risk Factors:

Tick bite within last 2 months	☐ Yes	☐ No	☐ Unk
History of splenectomy	☐ Yes	☐ No	☐ Unk
Recent blood transfusion	☐ Yes	☐ No	☐ Unk
Underlying immunosuppressive condition present	☐ Yes	☐ No	☐ Unk
*If yes, condition*_____			
_____Other	☐ Yes	☐ No	☐ Unk
_____Other	☐ Yes	☐ No	☐ Unk

REPORTED BY	**ADDRESS**	**TELEPHONE NUMBER**	**DATE OF REPORT** MONTH DAY YEAR
☐ Check here if completed by the Health Department			

CVPH/EDCP 11oct07